# **Duval County Epidemiology Surveillance Report**

The Florida Department of Health (DOH) Duval County, Epidemiology Program

Rick Scott Governor Celeste Philip, MD, MPH
State Surgeon General and Secretary

**June 2017** 

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# Report Summary

The month of June included a variety of surveillance and investigation activities in Duval County. These data summaries included enteric disease, influenza, influenza-like illness (ILI), mosquito-borne illness surveillance, active tuberculosis cases, sexually transmitted diseases (STD), as well as other reportable diseases/conditions. Limitations to the accuracy of this information include persons who do not seek healthcare, healthcare providers, and those that may not recognize, confirm or report notifiable diseases/conditions. This report includes data reported as of June 30, 2017, unless noted otherwise.

DOH-Duval reported 295 cases of various diseases/conditions in June. Please note that all cases meet the case definition for a confirmed, probable or suspect case. Among reported cases, there was a case of travel-associated malaria, Escherichia coli (STEC), Haemophilus influenza, pertussis, and vibriosis (Vibrio vulnificus).

Surveillance data for select enteric diseases showed a notable increase with the start of summer, while ILI activity was predictably low.

This issue of the Duval County Epidemiology Surveillance Report will also highlight updates to Zika virus disease testing and Duval County's mumps investigation.

As summer begins, enteric disease activity reported in June showed a notable increase. Cases of salmonellosis (39), shigellosis (8), and campylobacteriosis (24) increased from the previous reporting month of May (weeks 18-22, 2017) (Figures 2-4), while cases of cryptosporidiosis (0) and giardiasis (1) decreased during this time (Figures 5-6).

Compared to 2016, cases of campylobacteriosis and shigellosis increased by 75% and 62%, respectively while cases of salmonellosis showed a slight increase and cases of giardiasis decreased by 50% (Figure 1).

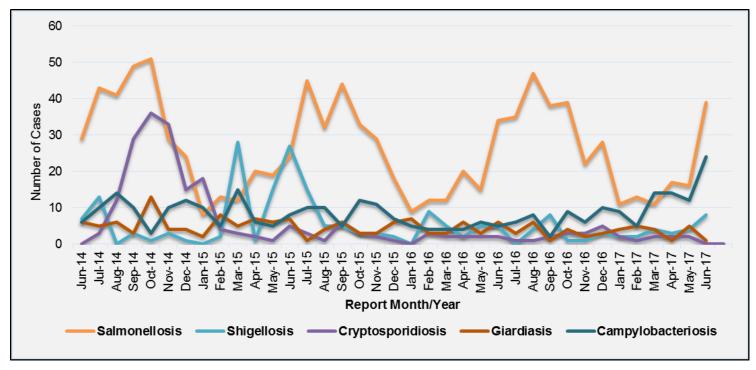
Cases reported for the 75 and older age group showed a significant increase in cases from the previous reporting year with 65% followed by 35-54 age group with 34%.

There were no enteric disease outbreaks reported during the month of June.

(Source: FDENS EpiCom, ESSENCE).

For prevention information, visit <u>CDC.gov or Floridahealth.gov/diseases-and-conditions/norovirus-infection.html</u>

**Figure 1.** Reported Cases of Select Enteric Conditions by Report Month/Year in Duval County, June 2014 – June 2017



**Figure 2.** Reported Cases of Salmonellosis by Report Year-Week and Age Group, Duval County Week 26,2015 – Week 26,2017

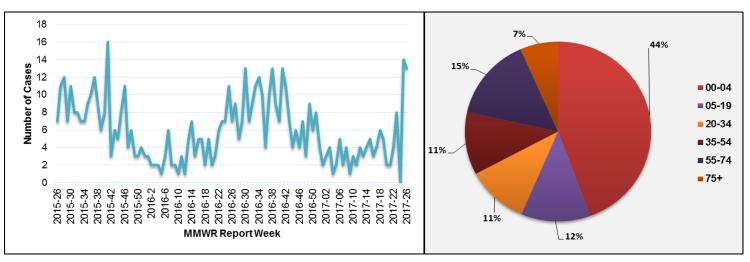


Figure 3. Reported Cases of Shigellosis by Report Year-Week and Age Group, Duval County Week 26,2015 - Week 26,2017

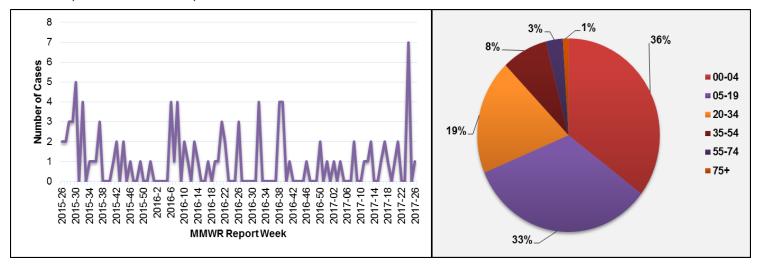


Figure 4. Reported Cases of Campylobacteriosis by Report Year-Week and Age Group, Duval County Week 26,2015 - Week 26,2017

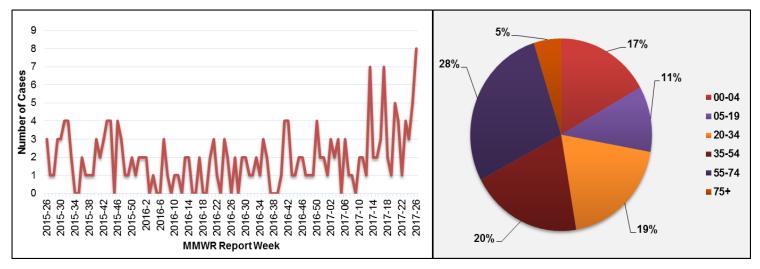
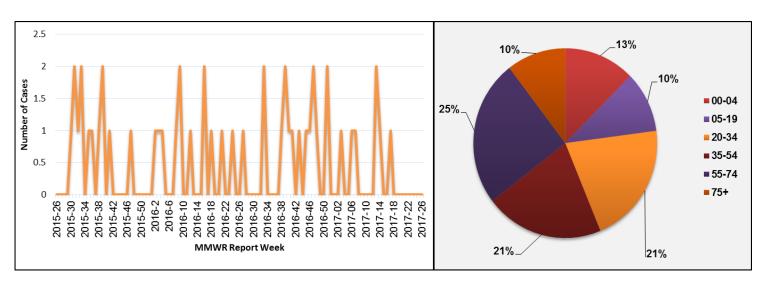
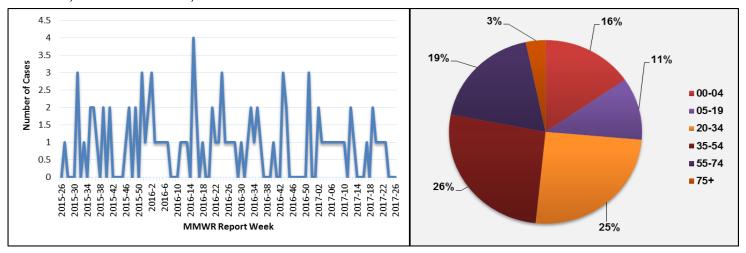


Figure 5. Reported Cases of Cryptosporidiosis by Report Year-Week and Age Group, Duval County Week 26,2015 - Week 26,2017



#### Enteric Disease Cont. d & Influenza and ILI Overview

**Figure 6.** Reported Cases of Giardiasis by Report Year-Week and Age Group, Duval County Week 26,2015 – Week 26,2017



# Influenza and ILI Summary in Duval County

Influenza and ILI activity continued to decrease during the month of June. Emergency department (ED) and urgent care centers (UCC) ILI visits monitored through ESSENCE, reported lower levels when compared to previous seasons (Figure 7). ED and UCC influenza and ILI visits for all age groups showed similar trends in comparison to previous seasons (Figure 8).

During the month of June the Electronic Laboratory Reporting (ELR) system reported 26 (31%) positive specimens of the 84 submitted for influenza testing. Of those, subtyping showed that Influenza B (16) was the dominant strain detected by laboratories, which is the same strain circulating state and nationwide and the typical strain present in summer months (Figure 9). According to the Bureau of Public Health Laboratories (BPHL) -Jacksonville, two (2) specimens from Duval County tested positive for Influenza B Unspecified and seven (7) tested negative (Figure 10).

Source: Flu Report, Merlin

#### State influenza and influenza-like illness activity:

Influenza and ILI activity reported in Florida, during the month of June, showed low levels. Specimens submitted to BPHL for influenza testing were positive by real-time Reverse Transcription Polymerase Chain (RT-PCR). Influenza A (H3) was the dominant strain subtyped.

Source: Florida Department of Health, Florida Flu Review

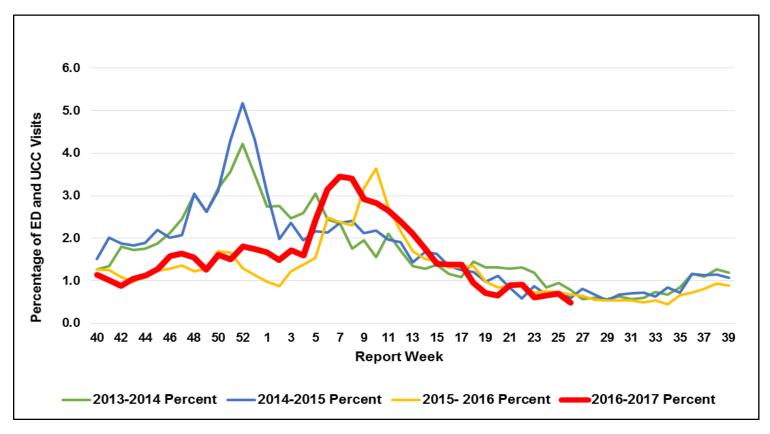
#### National influenza activity:

Influenza viruses continue to circulate at low levels nationally. The Centers for Disease Control and Prevention (CDC) identified an antigenically drifted influenza B Victoria lineage strain circulating nationally. This strain is different from the influenza B Victoria lineage strain contained in the current 2016-17 influenza vaccination formulations. In the spring of 2017 avian influenza A (H7N9) was identified in chickens in Tennessee, Alabama, and Kentucky, while influenza A (H7) was identified in chickens in Georgia and A(H5N2) in turkeys in Wisconsin. Avian influenza has **not** been identified in Florida birds or humans in 2017.

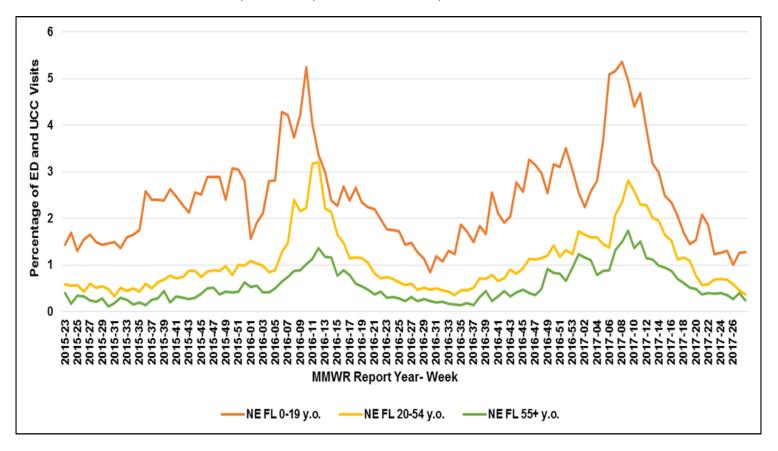
To learn more about HPAI, please visit: www.floridahealth.gov/novelflu.

**Sources:** Florida Department of Health Florida Flu Review, Centers for Disease Control and Prevention, FluView, National Center for Immunization and Respiratory Diseases (NCIRD).

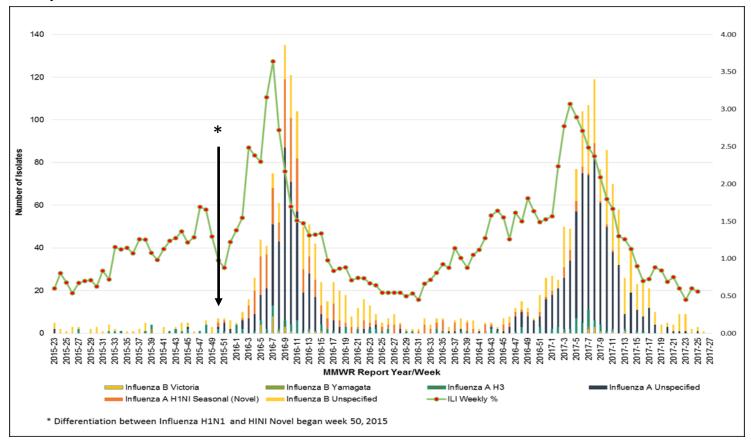
**Figure 7:** Percentage of ED and UCC Visits for Influenza and ILI Chief Complaints, ESSENCE– FL, Duval County Participating Hospitals (n=11)



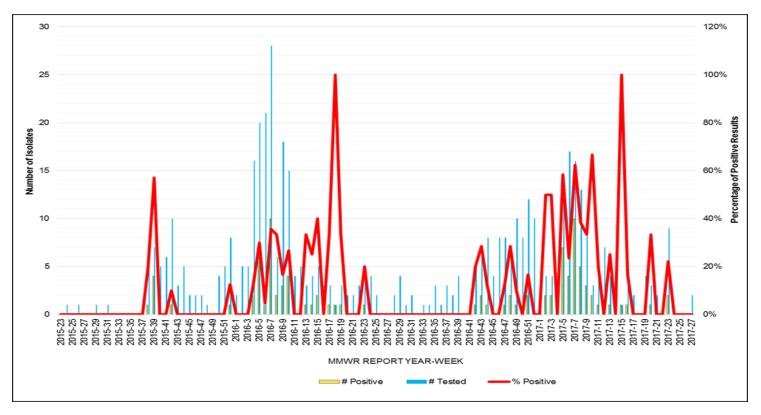
**Figure 8:** Percentage of ED and UCC Visits for Influenza and ILI by Age Comparison, Northeast Florida ESSENCE-FL Facilities, Week 23, 2015 – Week 26, 2017



**Figure 9:** Number of Influenza Positive Specimens Reported through Electronic Lab Reporting by Subtype and Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE-FL ED data, Duval County, Week 23, 2015 - Week 26, 2017



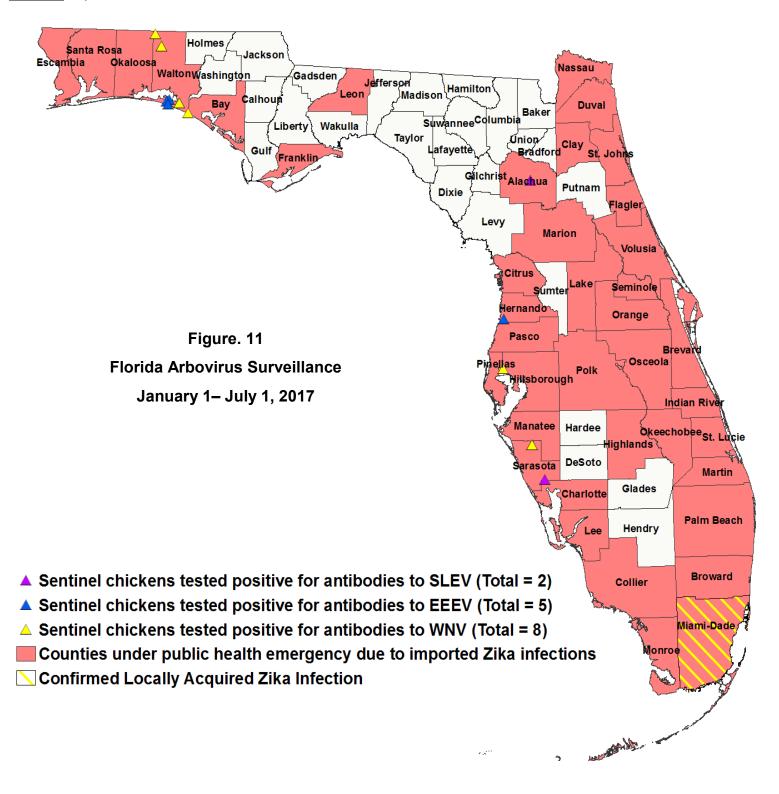
**Figure 10**: Number of Specimens Tested by Bureau of Public Health Laboratories (BPHL) and Percent Positive for Influenza by Lab Event Date, Duval County, Week 23, 2015 – Week 26, 2017



# Mosquito-borne Illness Surveillance

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as West Nile virus (WNV), Eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV), as well as exotic viruses such as dengue virus (DENV), chikungunya virus (CHIKV) and California encephalitis group viruses (CEV), and Zika virus disease. Malaria, a parasitic mosquito-borne disease is also included (Figure 11).

Source: http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html



# **Duval County 2017 Human Case Summary**

No local cases of chikungunya fever, west Nile Virus (WNV), dengue, malaria or Zika virus were reported in Duval County during the month of June.

**International Travel-Associated Malaria Cases:** One case of malaria with onset in 2017 has been reported. The country of origin was Uganda.

# State of Florida 2017 Human Case Summary

This report contains information for all arboviruses in 2017. For additional information on Zika virus cases from 2016, please visit http://www.floridahealth.gov/diseases-and-conditions/zika-virus/index.html.

**International Travel-Associated Chikungunya Fever Cases:** One case of chikungunya with onset in 2017 has been reported in an individual with travel history to a chikungunya endemic country in the two weeks prior to onset. Country of origin was Brazil. The country reporting the case was Broward.

**International Travel-Associated Dengue Fever Cases:** Three cases of dengue with onset in 2017 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were: Brazil, Guatemala, and Nigeria. Counties reporting cases were Miami-Dade, Osceola and Palm Beach. One case was reported in a non-Florida resident. In 2017, two of the three cases of dengue reported in Florida have been serotyped by PCR.

**Zika Virus Infections Acquired in Florida:** In 2017, four locally acquired Zika virus infection cases with exposure in 2016 and testing in 2017 have been reported by Miami-Dade County. In addition, eighteen individuals reported travel in 2016 to both Miami-Dade and countries with areas of active Zika virus transmission and exposure location could not definitively be determined.

International Travel-Associated Malaria Cases: Nineteen cases of malaria with onset in 2017 have been reported. Countries of origin were Brazil (2), Cameroon (2), Ethiopia/Malawi, Ghana, Ghana/Liberia, Guatemala, Haiti (2), Indonesia, Sierra Leone, South Africa, Togo, Uganda (4) and Venezuela. Counties reporting cases were Alachua, Brevard, Broward, Duval, Escambia, Hillsborough, Lee, Leon (3), Miami-Dade (4), Monroe, Orange (2), Palm Beach, and Seminole. One case was reported in a non-Florida resident.

Nine cases (47%) were diagnosed with *Plasmodium falciparum*. Seven cases (37%) were diagnosed with *Plasmodium vivax*. Two cases (11%) were diagnosed with *Plasmodium malariae*. One case (5%) was diagnosed with both *Plasmodium malariae* and *Plasmodium ovale*.

**WNV** activity: No human cases have been reported. In 2017, positive samples from eight sentinel chickens have been reported from three counties.

**SLEV activity:** No human cases have been reported. In 2017, positive samples from two sentinel chickens have been reported from two counties.

**EEEV activity:** No human cases have been reported. In 2017, positive samples from 5 sentinel chickens have been reported from two counties.

#### Zika Virus Action Update

In 2017, Quest Diagnostics, the Department's contracted laboratory, began offering Zika testing. As of July 1, 2017 DOH-Duval will continue ordering testing for asymptomatic women utilizing current processes through Quest Diagnostics. Additionally, our Public Health Laboratories (BPHL) will continue to support the testing of people who meet the epidemiological criteria.

# **Duval Mumps Investigation**

On June 15, 2017, DOH-Duval received a call from a local physician on a confirmed case of mumps linked to two probable cases in a neighboring county. The index case reported symptoms of parotitis, low-grade fever and malaise shortly after returning home from summer break from a college in another state. The visiting state's DOH confirmed cases of mumps in recent months on the college campus. Two of the three cases were fully immunized with two measles-mumps-rubella (MMR) vaccines and had prolonged exposure to the index case, while the other person received only one dose of MMR in 2017. The cases period of symptoms ranged from May 21 through June 8, 2017. Surveillance continues in an effort to identify contacts and those with symptoms of mumps, as well as encourage evaluation and testing for mumps by physicians.

While mumps is a viral illness caused by a paramyxovirus that occurs worldwide; humans are the only known hosts. The incubation period is usually 16–18 days but can range from 12–25 days after exposure. Mumps transmission likely occurs before the salivary glands begin to swell and within the five days after swelling begins. CDC recommends isolating mumps patients for five days after glands begin to swell. Mumps virus can be found in respiratory secretions as early as three days before onset and up to nine days after onset, however infected individuals are most infectious within the first five days. Transmission occurs through respiratory droplets and direct contact with nasopharyngeal secretions (mouth, nose or throat of an infected individual).

Current CDC recommendations call for the first dose of the MMR or measles-mumps-rubella-varicella (MMRV) between 12-15 months and the second dose between 4-6 years of age. The second dose can be administered before four years of age provided greater than four weeks has elapsed following an MMR or 12 weeks has elapsed following an MMRV. Advisory Committee on Immunization Practices (ACIP) recommendations for prevention and control of mumps were updated. Evidence of immunity through documentation of vaccination is now defined as:

- One dose of live mumps vaccine for preschool-aged children and for adults not at high risk for exposure and infection, and
- Two doses of live mumps vaccine for school-aged children (i.e., grades K-12) and for adults at high risk for exposure and infection (i.e., health-care workers, international travelers, and students at post-high-school education institutions). **Sources:** www.cdc.gov/mumps/index.html and www.apic.org.

Table 1: Tuberculosis (TB) Surveillance, Duval County - 1/1/2017 through 7/11/2017

|                  |           | <u> </u>        | Active TB C        | cases Reported as of July 11, 2017           |          |                 |         |
|------------------|-----------|-----------------|--------------------|--|----------|-----------------|---------|
|                  | Count     | Total Cases     |                    |  | Count    | Total Cases     | Percent |
| Gender           | ·         | '               |                    | Race   | ·        |                 |         |
| Male             | 9         | 11              | 81.8%              | Asian  | 3        | 11              | 27.3%   |
| Female           | 2         | 11              | 18.2%              | Pacific Islander/Other                       | 1        | 11              | 9.1%    |
| Country          | of Origin | ı               |                    | Black  | 4        | 11              | 36.4%   |
| U.S.             | 6         | 11              | 54.5%              | White  | 3        | 11              | 27.3%   |
| Non-U.S.         | 5         | 11              | 45.5%              | Ethnicity                                    |          |                 |         |
| Age Grou         | ıp        |                 |                    | Hispanic                                     | 1        | 11              | 9.1%    |
| < 5              | 0         | 11              | 0.0%               | Non-Hispanic                                 | 10       | 11              | 90.9%   |
| 5-14             | 0         | 11              | 0.0%               | Risk Factors                                 |          |                 |         |
| 15-24            | 1         | 11              | 9.1%               | Excess alcohol use within past year          | 1        | 11              | 9.1%    |
| 25-44            | 4         | 11              | 36.4%              | HIV co-infection                             | 2        | 11              | 18.2%   |
| 45-64            | 2         | 11              | 18.2%              | Injection drug use within past year          | 1        | 11              | 9.1%    |
| <u>&gt;</u> 65   | 4         | 11              | 36.4%              | Homeless within past year                    | 1        | 11              | 9.1%    |
|                  |           |                 |                    | Incarcerated at diagnosis                    | 0        | 11              | 0.0%    |
|                  |           |                 |                    | Unemployed                                   | 6        | 11              | 54.5%   |
|                  |           |                 |                    | Drug Resistance                              |          |                 |         |
|                  |           |                 |                    | Resistant to isoniazid*                      | 0        | 4               | 0.0%    |
| *For drug        | resistan  | ce testing, the | total cases reflec | t the cases that have susceptibility testing | comple   | ted and reporte | ed.     |
| <b>Prelimina</b> | ry data a | as of 7/11/17.  | Data is subject t  | to change based on ongoing submissi          | on of RV | CTs.            |         |
| Prepared b       | y: Ashle  | y Donnelly, MPI | H, CPH, TB Surveil | ance Coordinator                             |          |                 |         |

| Infectious                                    | Infectious and Early Latent Syphilis Cases | y Latent    | Syphilis C | ases        |  | Chla    | Chlamydia Cases | ISES  |     |                    | Gonorrhea Cases | ea Cases |       |     |
|---|--|-------------|------------|-------------|--|---------|-----------------|-------|-----|--------------------|-----------------|----------|-------|-----|
| Sex   | Area 4*                                    | %           | Duval      | %           | Sex  | Area 4* | %               | Duval | %   | Sex                | Area 4*         | %        | Duval | %   |
| Female  | 9  | 21%         | 9          | 22%         | Female   | 462     | %99             | 357   | %99 | Female             | 127             | 44%      | 106   | 43% |
| Male  | 22   | %6/         | 21         | 78%         | Male   | 241     | 34%             | 185   | 34% | Male               | 161             | 26%      | 139   | 21% |
| Race  | Area 4*                                    | %           | Duval      | %           | Race   | Area 4* | %               | Duval | %   | Race               | Area 4*         | %        | Duval | %   |
| Black   | 24   | %98         | 23         | 85%         | Black  | 333     | 47%             | 284   | 52% | Black              | 191             | %99      | 173   | 71% |
| Hispanic                                      | 1  | 4%          | 1          | 4%          | Hispanic   | 41      | %9              | 29    | 2%  | Hispanic           | 10              | 3%       | 10    | 4%  |
| White   | 3  | 11%         | 3          | 11%         | White  | 204     | 29%             | 130   | 24% | White              | 69              | 20%      | 39    | 16% |
| Other   | 0  | %0          | 0          | 0           | Other  | 125     | 18%             | 66    | 18% | Other              | 28              | 10%      | 23    | %6  |
| Age   | Area 4*                                    | %           | Duval      | %           | Age  | Area 4* | %               | Duval | %   | Age                | Area 4*         | %        | Duval | %   |
| 0-14  | 0  | %0          | 0          | %0          | 0-14   | 9       | 1%              | 2     |     | 0-14               | 1               | %0       | 1     | %0  |
| 15-19   | 4  | 14%         | 4          | 15%         | 15-19  | 161     | 23%             | 127   | 23% | 15-19              | 45              | 16%      | 44    | 18% |
| 20-24   | 9  | 18%         | 5          | 19%         | 20-24  | 276     | 36%             | 203   | 37% | 20-24              | 91              | 32%      | 73    | 30% |
| 25-29   | 4  | 14%         | 4          | 15%         | 25-29  | 164     | 23%             | 124   | 23% | 25-29              | 72              | 25%      | 61    | 25% |
| 30-39   | 7  | 25%         | 9          | 22%         | 30-39  | 74      | 11%             | 09    | 11% | 30-39              | 25              | 18%      | 45    | 18% |
| 40-54   | 7  | 25%         | 7          | 26%         | 40-54  | 20      | 3%              | 20    | 4%  | 40-54              | 21              | %/       | 16    | 7%  |
| £5+   | 1  | 4%          | 1          | 4%          | 55+  | 3       | %0              | 3     | 1%  | 55+                | 9               | 2%       | 5     | 2%  |
| Total Cases                                   | 28   | 8           | 27         | 7           | <b>Total Cases</b>   | 703     | 13              | 545   | 2   | <b>Total Cases</b> | 288             | 88       | 245   | 5   |
| Area 4* consi                                 | st of Bake                                 | r, Clay, Du | wal, Nass  | au and St.  | Area 4* consist of Baker, Clay, Duval, Nassau and St. Johns Counties |         |                 |       |     |                    |                 |          |       |     |
| Prepared by: Clement Richardson, STD Surveill | Clement R                                  | ic hardsor  | J, STD Su  | irveillance | lance Supervisor   |         |                 |       |     |                    |                 |          |       |     |
| · (compare)                                   |  |             | 5          | 2           | 100010000  |         |                 |       |     |                    |                 |          |       |     |

Table 3. Provisional Cases\* of Select Reportable Diseases/Conditions, Duval County, Florida, June 2017

|  |                                |                                |           | na   | AL         |                  |          |             |               |                  |             | All Countie           | unties       |              |                  |        |
|--|--------------------------------|--------------------------------|-----------|--|------------|------------------|----------|-------------|---------------|------------------|-------------|-----------------------|--------------|--------------|------------------|--------|
| Disease  |                                | June                           | ψ.        |  |            | Cumulative (YTD) | ve (YTD) |             |               | June             | ē.          |                       |              | Cumula       | Cumulative (YTD) |        |
|  | 2017                           | 2016                           | Mean      | Median   | 2017       | 2016             | Mean     | Median      | 2017          | 2016             | Mean        | Median                | 2017         | 2016         | Mean             | Median |
| A. Vaccine Preventable Diseases  |                                |                                |           |  |            |                  | Н        |             |               |                  |             |                       |              |              |                  |        |
| Ö  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | 0                | 0           | 0                     | 0            | 0            | 0                | 0      |
|  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | e                | 9.0         | 0                     | 4            | 4            | 4                | 4      |
| Mumps  | 2                              | 0                              | 0         | 0  | 2          | 0                | 0        | 0           | o             | 2                | 2           | 2                     | 88           | 19           | 00               | 12     |
|  | 4                              | 0                              | 99        | 7  | 11         | 4                | 18.4     | 138         | 37            | 81               | 58.6        | 92                    | 88           | 185          | 274.4            | 283    |
| Rubella<br>Tetanus   | 0                              | 0                              | 0         | 0  | 0          | 0                | 0.2      | 0           | 0             | 0 -              | 0 4         | 0                     | - 0          | 2            | 2.2              | 2      |
| -  | 0                              | 2                              | 4.2       | 4  | 23         | 19               | 24.4     | 25          | 39            | 4                | 39.8        | 37                    | 388          | 451          | 420              | 417    |
|  |                                |                                |           |  |            |                  |          |             |               |                  |             |                       |              |              |                  |        |
| Creutzfeldt-Jak ob Disease (CJD)   | 0                              | 0                              | 0         | 0  | -          | _                | 0.2      | 0           | 2             | _                | 2           | 2                     | 11           | 7            | 11               | 12     |
| Haemophilus influenzae Invas ive Diseas e  | 2                              | e                              | 4.1       | -  | 11         | 92               | 13       | 16          | 34            | 19               | 21.2        | 21                    | 152          | 208          | 184.2            | 162    |
| Meningitis: Bacterial or Mycotic   | -                              | -                              | 1.4       | -  | 2          | n                | 7.8      | 00          | 13            | 9                | 11.8        | 12                    | \$           | 8            | 72               | 74     |
| Meningococcal Disease<br>Starby Innoverse arrans Infertion: Intermediate Resistance  | 0                              | 0                              | 0         | 0  | -          | 0                | 9.0      | 0           | -             | 0                | 2.8         | m                     | 7            | 7            | 23.4             | 88     |
| to Vancomy din (VISA)  | 0                              | 0                              | 0         | 0  | 0          | 0                | -        | -           | 0             | -                | 0.2         | 0                     | -            | 2            | 2.2              | 2      |
| Staphylococcus aureus Infection: Resistant to Vancomy cin  |                                |                                |           |  |            |                  | c        |             |               |                  |             |                       | •            | •            | •                |        |
| Strep pneumoniae Invasive Disease: Drug-Resistant  | -                              | 0 0                            | 9.0       | 0  | 0          | 5                | 5 4      | 5 4         | 28            | 5                | 22.8        | 24                    | 2 44         | 130          | 224.8            | 285    |
| Disease:   | 2                              | 1                              | 0.8       | 1  | 11         | 13               | 13.8     | 13          | 27            | 28               | 27.2        | 28                    | 209          | 278          | 284.2            | 308    |
| C. Enteric Infections  |                                |                                |           |  |            |                  |          |             |               |                  |             |                       |              |              |                  |        |
| Campy lobacterios is   | 25                             | 9                              | 6         | 00   | 93         | 88               | 43.2     | 42          | 438           | 312              | 322         | 312                   | 2177         | 1790         | 1588.6           | 1584   |
| Cry ptos poridios is   | -                              | 2                              | 2.8       | 2  | 00         | 11               | 11.4     | 11          | 25            | 41               | 55.4        | 14                    | \$           | 215          | 242.6            | 223    |
| Cy clos poriasis   | -                              | 0                              | 1.2       | 0  | 2          | 0                | 1.2      | 0           | 28            | 17               | 15          | 41                    | 47           | 8            | 92               | 130    |
|  | 2 2                            | m u                            | - 0       |  | 9 ;        | e 2              | 4.0      | 9 2         | 70            | \$ 5             | 45.4        | 44 1                  | 88           | 298          | 234.8            | 217    |
| Glandias B: Acute  D. Hamplytic I famic Syndrome (HI IS)   | 7 0                            | 0 0                            | 0 C       | 4 C  | <u>†</u> C | 4, 0             | 8.07     | 4 0         | 0 +           | coi.             | 4. 6        | × C                   | φ<br>(γ      | 080          | 2,000            | 912    |
|  | 0 0                            | 0                              | 0         | 0  | 0 0        | , -              | 0 0      |             | - 6           | - ıc             | 3           | 0                     | , 16         | . 6          | 24 5             | 1 4    |
|  | 41                             | 9                              | 37.2      | 88   | 120        | 128              | 120.2    |             | 714           | 597              | 603.4       | 597                   | 2423         | 2350         | 2310.4           | 2285   |
| 47   | 5                              | e                              | 18.2      | 10   | 28         | 8                | 80.4     | ¥           | 144           | 74               | 176.8       | 180                   | 589          | 419          | 895.4            | 1052   |
| Typhoid Fever (Salmonella Serotype Typhi)  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0.2      |             | 9             | 0                | 9.0         | -                     | 24           | 0            | 7.2              | 0      |
| D. Viral Hepatitis   | -                              | ,                              | 0         | c  | ,          | ,                | 00       | C           | 20            | 7                | 0           | 0                     | 140          | 92           | 5 D 7            | 8      |
| Departies A. Acute   |                                | - 6                            | t &       | 5 -  | - 5        | - 6              | 10.0     | 5 5         | 88            | - 82             | 44          | 0 00                  | 35           | 247          | 238.2            | 3 5    |
| Hepatitis B: Surface Antioen in Pregnant Women   | - 2                            | 0 4                            | 5 4       | - 4  | 9 00       | 5 22             | 13.01    | 2 60        | 3 8           | 37.5             | 42.8        | 8 64                  | 23           | 213          | 248.4            | 245    |
| ,  | -                              | 0                              | 0.2       | 0  | 11         | 2                | 2.8      | 2           | 20            | 37               | 19.4        | 16                    | 156          | 213          | 122              | 104    |
| E. Vector-Bome, Zoonoses   |                                |                                |           |  |            |                  |          |             |               |                  |             |                       |              |              |                  |        |
| Chik ungunya Fever   | 0                              | 0                              | 0.2       | 0  | 0          | 1                | 0.6      | 0           | 0             | 1                | Ì           | 1                     | 1            | 9            | 34.4             | 9      |
| Ciguatera Fish Poisoning   | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 3             | 0                |             | 4                     | 17           | 7            | 12.8             | 15     |
| Dengue Fever   | 0 0                            | 0                              | 0 0       | 0 0  | 0          | 0 0              | 0.7      | 0           | - 0           | 0 0              |             | n c                   | 4 c          | 5 0          | 80.00            | S C    |
| Ehrlichios is (Ehrlichia ewingii)  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | 0                |             | 0                     | 0            | 0            | 0                | 0      |
| Ehrlichios is - HME (Ehrlichia chaffeers is)   | 0                              | 0                              | 0.2       | 0  | 0          | 1                | 9.0      | 1           | 5             | 5                | 5.6         | c)                    | 12           | 15           | 18.2             | 15     |
| Ehrlichios is/Anaplasmos is: Undetermined  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | 0                |             | 0                     | 0            | 0            | 0                | 0      |
| Leptospirosis  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0 !      | 0           | - 1           | 0                |             | 0                     | en i         | 0            | 9.0              | -      |
| Lyme Disease   | 0 1                            | 4 0                            | 8.0       | 0  | n (        | 0 0              | 8        |             | 32            | 6                |             | 32                    | 121          | 8 8          | 70.2             | B      |
| Material Material  | - 0                            | 0 0                            | 9 0       | 0  | N C        | N C              | 4. 0     | - 0         | ` 0           | n c              | 1.2         | 0 4                   | 77 0         | 8 8          | 30               | 8 8    |
| St. Louis Encephalitis Neuroinvasive Disease   | 0                              | 0                              | 0         | 0  | 0          | 0                | 9 0      | 0           | 0             | 0                | 0           | 0                     | 0            | 2 0          |                  | 90     |
| Zika Virus Disease and Infection- Congenital   | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | 2                | 9.0         | 0                     | ю            | 4            | 0.8              | 0      |
| Zika Virus Disease and Infection- Non-Congenital   | 0                              | 8                              | 1.2       | 0  | 0          | 7                | 1.4      | 0           | 24            | 187              | 33.2        | 0                     | 138          | 390          | 78.2             | 0      |
| F. Others  |                                |                                |           |  |            |                  |          |             |               |                  |             |                       |              |              |                  |        |
| Botulis m: Infant  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0        | 0           | 0             | 0                | 0           | 0                     | 0            | 0            | 0.2              | 0      |
| Brucellosis  | 0                              | 0                              | 0         | 0  | 0          | 0                | 0.2      | 0           | 0             | -                | 9.0         | -                     | -            | 2            | 6.4              | S)     |
| Carbon Monoxide Poisoning  | 0                              | -                              | 8.        | 0  | -          | 4                | 6.4      | 2           | 33            | 8                | 15.6        | 11                    | 111          | 139          | 92               | 100    |
| Hansen's Disease (Leprosy)   | 0 0                            | 0                              | 0 ,       | 0  | ۰ ;        | 0;               | 0.2      | 0           | 0 8           | 0 8              | 0.8         | - 6                   | e 3          | 0 [          | 7.8              | 7      |
| Legionellos is   | 7 7                            | n •                            | 9         | 7 0  | 4 1        | 4. 0             | 20 0     | D .         | 90 4          | 38 8             | 3 8         | 32                    | 4 5          | 35 8         | 131.8            | 130 k  |
| VIDUOS B≄  |                                | F                              |           | 5  | `          | ١,               | 2.0      | 4.          |               |                  |             |                       | 521          |              | 78.7             | 9      |
| This report consist of confirmed and probable cases based on the date of event(initial)  + Mean of the same month in the previous five years: ¶ Median for the same month in t | n the date of<br>an for the sa | r event(initial<br>me month ir | 8 2       | reported in Merlin to the<br>previous five vears | Ď          | eau of Epide     | miology. | Incidence d | data for 2017 | 7 is provisional | nal and may | y include Non-Florida | on-Florida ( | 28<br>B<br>B |                  |        |
| ** Includes E. coli 0157:H7: shige-toxin positive, sergoroup non-0157: and shige-toxin   | non-0157: ar                   | xot-epide-tox                  | pos itive |  | pagn       |                  |          |             |               |                  |             |                       |              |              |                  |        |
|  |                                |                                |           |  | and a      |                  |          |             |               |                  |             |                       | İ            | Ī            |                  |        |

The Florida Department of Health in Duval County <a href="https://www.duval.floridahealth.gov/">www.duval.floridahealth.gov/</a> (904) 253-1850
Prepared by: Aja Arrindell M.P.H.,M.S.- Aja.Arrindell@flhealth.gov, Editors: Ellen Dugan M.P.H and Saad Zaheer, MD, M.P.S.H.,FACE – All data are provisional



## **Surveillance systems**

**ESSENCE:** The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) is a bio-surveillance system that collects emergency department (ED) chief complaint (CC) data from participating hospitals and urgent care centers. DOH-Duval monitors 11 reporting hospitals.

**ILINet (previously referred to as the Sentinel** *Provider Influenza Surveillance Program*): IILINet is a nationwide surveillance system composed of sentinel providers, predominately outpatient health care providers. Duval County has one ILINet provider.

**Merlin:** is a database for the State of Florida. It serves as the state's repository of reportable disease case reports, and features automated notification of staff about individual cases of high-priority diseases. All data are provisional.

**NREVSS:** The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors temporal and geographic patterns associated with the detection of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses, and rotavirus.

# Surveillance vocabulary

**Chief Complaint (CC):** The concise statement describing the symptom, problem, condition, diagnosis, physician recommended return, or other factors that are the reason for a medical encounter in ESSENCE.

**Count:** The number of emergency department visits relating to a syndrome of query in ESSENCE.

**Event Date:** Reportable diseases and conditions presented within this report are reported by event date.

**Electronic Laboratory Reporting (ELR):** Electronic transmission from laboratories to public health laboratory reports which identify reportable conditions.

**MMWR week:** The week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of Morbidity and Mortality Weekly Report (MMWR) disease Incidence reporting and publishing.

**Syndrome:** An illness classified in ESSENCE by ICD 10 codes or pharmaceutical syndromic surveillance.

**Syndromic Surveillance:** Health-related data that precede diagnosis and signal a sufficient probability of a case or an outbreak to warrant further public health response.

#### Other Links and Resources:

Florida Department of Health, Bureau of Epidemiology: http://www.doh.state.fl.us/disease\_ctrl/epi/index.html

Florida Annual Morbidity Statistics Reports: http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/data-and-publications/fl-amsr1.html

Influenza Surveillance Reports: http://www.floridahealth.gov/diseases-and-conditions/influenza/index.html

# Figure 12. Hospitals Participating in ESSENCE



#### **Public Health Surveillance**

Public health surveillance is the continuous, systematic collection, analysis and interpretation of health-related data needed for the planning, implementation, and evaluation of public health practice. Such surveillance can:

- Serve as an early warning system for impending public health emergencies;
- Document the impact of an intervention, or track progress towards specified goals; and
- Monitor and clarify the epidemiology of health problems, to allow priorities to be set and to inform public health policy and strategies.

Within Duval County, surveillance data is obtained through:

- Emergency department (ED) and UCC syndromic surveillance monitored through Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)
- The ILINet Program
- Merlin
- Laboratory data from the Bureau of Laboratories (BPHL)
- Florida Poison Information Center Network (FPICN)
- Electronic Laboratory Reporting (ELR)
- Passive reports from the community
- Notifiable disease outbreaks



Epidemiology Program 515 W 6th Street, MC-28 Jacksonville, FL 32206

# Reportable Diseases/Conditions in Florida

Practitioner List (Laboratory Requirements Differ)

Effective June 4, 2014



#### Did you know that you are required\* to report certain diseases to your local county health department?

DOH-Duval Disease reporting telephone numbers:

AIDS, HIV - (904) 253-2989, (904) 253-2955 STD - (904) 253-2974, Fax - (904) 253-2601 TB Control - (904) 253-1070, Fax - (904) 253-1943 All Others- (904) 253-1850, Fax - (904) 253-1851 After Hours Emergency - (904) 434-6035

- Report immediately 24/7 by phone upon initial suspicion or laboratory test order
- Report immediately 24/7 by phone
  - Report next business day
- + Other reporting timeframe

- Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed that is of urgent public health significance
- Acquired immune deficiency syndrome (AIDS)
- Amebic encephalitis
- ! Anthrax
- Arsenic poisoning
- Arboviral diseases not otherwise listed
- ! Botulism, foodborne, wound, and unspecified
- · Botulism, infant
- Brucellosis
- California serogroup virus disease
- Campylobacteriosis
- Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors
- Carbon monoxide poisoning
- Chancroid
- Chikungunya fever
- R Chikungunya fever, locally acquired
- Chlamydia
- ! Cholera (Vibrio cholerae type O1)
- Ciguatera fish poisoning
- + Congenital anomalies
- Conjunctivitis in neonates <14 days old</li>
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis
- Cyclosporiasis
- Dengue fever
- Dengue fever, locally acquired
- ! Diphtheria
- Eastern equine encephalitis
- Ehrlichiosis/anaplasmosis
- Escherichia coli infection, Shiga toxinproducing
- Giardiasis, acute
- ! Glanders
- Gonorrhea

- Granuloma inguinale
- ! Haemophilus influenzae invasive disease in children <5 years old</p>
- Hansen's disease (leprosy)
- Hantavirus infection
- Hemolytic uremic syndrome (HUS)
- Hepatitis A
- Hepatitis B, C, D, E, and G
- Hepatitis B surface antigen in pregnant women or children <2 years old</li>
- Herpes B virus, possible exposure
- Herpes simplex virus (HSV) in infants <60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children <12 years old</li>
- + Human immunodeficiency virus (HIV) infection
- HIV, exposed infants <18 months old born to an HIV-infected woman
- Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children <6 years old; anogenital papillomas in children <12 years old</li>
- ! Influenza A, novel or pandemic strains
- Influenza-associated pediatric mortality in children <18 years old</p>
- Lead poisoning
- Legionellosis
- Leptospirosis
- Listeriosis
- Lyme disease
- Lymphogranuloma venereum (LGV)
- Malaria
- ! Measles (rubeola)
- ! Melioidosis
- Meningitis, bacterial or mycotic
- ! Meningococcal disease
- Mercury poisoning
- Mumps
- Neonatal abstinence syndrome (NAS)
- Neurotoxic shellfish poisoning
- **Pertussis**
- Pesticide-related illness and injury, acute

- Plague
- ! Poliomyelitis
- Psittacosis (ornithosis)
- Q Fever
- Rabies, animal or human
- ! Rabies, possible exposure
- Ricin toxin poisoning
- Rocky Mountain spotted fever and other spotted fever rickettsioses
- ! Rubella
- . St. Louis encephalitis
- Salmonellosis
- Saxitoxin poisoning (paralytic shellfish poisoning)
- ! Severe acute respiratory disease syndrome associated with coronavirus infection
- Shigellosis
- ! Smallpox
- Staphylococcal enterotoxin B poisoning
- Staphylococcus aureus infection, intermediate or full resistance to vancomycin (VISA, VRSA)
- Streptococcus pneumoniae invasive disease in children <6 years old</li>
- Syphilis
- Syphilis in pregnant women and neonates
- Tetanus
- Trichinellosis (trichinosis)
- Tuberculosis (TB)
- ! Tularemia
- Typhoid fever (Salmonella serotype Typhi)
- ! Typhus fever, epidemic
- ! Vaccinia disease
- Varicella (chickenpox)
- ! Venezuelan equine encephalitis
- Vibriosis (infections of Vibrio species and closely related organisms, excluding Vibrio cholerae type O1)
- ! Viral hemorrhagic fevers
- West Nile virus disease
- ! Yellow fever

\*Section 381.0031 (2), Florida Statutes (F.S.), provides that "Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 395; or any laboratory licensed under chapter 483 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." Florida's county health departments serve as the Department's representative in this reporting requirement. Furthermore, Section 381.0031 (4), F.S. provides that "The department shall periodically issue a list of infectious or noninfectious diseases determined by it to be a threat to public health and therefore of significance to public health and shall furnish a copy of the list to the practitioners..."